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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,581	09/26/2003	John E. Krech	57135US004	8668

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EXAMINER
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FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/672,581	<b>Applicant(s)</b> KRECH ET AL.	
	<b>Examiner</b> Michael J. Feely	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☒ Claim(s) 6,8,9,11 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1203</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed February 2, 2004 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered. **There is no list of references attached to this IDS.**

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 62 of copending Application No. 09/990,601. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending claim is anticipated the broader instant claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 2-5 and 7-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 30, 32-37, 46-53, and 55-62 of copending Application No. 09/990,601. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pallet of the co-pending claims is an obvious product of the method of the instant invention, wherein the pallet of the copending claims is anticipated by the broader pallet produced in the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear which claim the limitations of claim 20 are further limiting. Applicant is claiming "a cured composition"; however, the parent claim is a method.

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*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 4, 5, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Terao et al. (JP 07-331033).

Regarding claim 1, Terao et al. disclose (1): a curable flame retardant-containing composition (Abstract) comprising: (a) a polyolefin resin or blends thereof (Abstract), and (b) a thermosetting resin (Abstract), wherein said composition contains at least one flame retardant, said at least one flame retardant being selected from the group consisting of non-halogenated flame-retardants (Abstract).

Regarding claims 4, 5, and 17, Terao et al. disclose: (4) a method comprising the steps of (a) providing a molten mixture (paragraphs 0010) comprising a curable epoxy resin (Abstract), a curative for the epoxy resin (paragraph 0009), said curative being stable at temperature of mixing (paragraphs 0009-0010), and at least one of a fully prepolymerized uncrosslinked hydrocarbon polyolefin resin and a fully prepolymerized uncrosslinked functionalized polyolefin resin (Abstract), wherein said molten mixture contains at least one flame retardant, said at least one flame retardant being selected from the group consisting of non-halogenated flame-retardants (Abstract), (b) applying the mixture to a substrate, mold, or storage vessel, or processing into a free-standing film (paragraph 0001), and (c) at any subsequent time, activating the curative to produce a semi-interpenetrating polymer network (Abstract; paragraph 0001);

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(5) further comprising one or more performance enhancement additives selected from the group consisting of antimicrobials, mildewcides, foaming agents, and fillers (paragraph 0011); and (17) further comprises one or both of bubbles and glass beads as fillers (paragraph 0011).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 3, 7, 10, 12, 13, 15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore, Jr. et al. (US Pat. No. 6,705,237) in view of Terao et al. (JP 07-331033).

Regarding claims 2, 3, 7, 10, 12, 13, 15, 16, and 18-20, Moore, Jr. et al. disclose: (2) a method of producing a flame retardant-containing plastic shipping or storage container (Abstract; column 15, line 62 through column 16, line 10) comprising the steps of (a) admixing a composition comprising (1) one or more thermosetting resins (column 15, line 62 through column 16, line 10), (2) a fully pre-polymerized uncrosslinked hydrocarbon polyolefin resin, and optionally a fully pre-polymerized uncrosslinked functionalized polyolefin (column 15, line 62 through column 16, line 10), and (3) at least one flame retardant (column 16, lines 11-27); and (3) further comprising a foamed structure (column 16, lines 44-58); (7) further comprising one or more performance enhancement additives selected from the group consisting of antimicrobial additives, mildewcides, foaming agents, fillers, and friction

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material on at least one surface thereof (column 16, lines 11-27); *(10)* present in the range of more than 0 and up to 70 parts by weight of the total composition (column 16, lines 11-27);

*(12)* wherein the plastic container is in the form of a pallet (Abstract); and

*(18)* wherein said flame retardant is present in the range of more than 0 and up to 70 parts by weight of the total weight of the polymeric composition (column 16, lines 11-27).

They do not explicitly disclose a curing agent or a curing step; however, one of ordinary skill in the art would have recognized that embodiments featuring a blend of thermoset and thermoplastic would have required some sort of curing agent and curing step to ensure an adequate degree crosslinking and structural integrity.

The teachings of Moore, Jr. et al. are deficient in that they do not explicitly teach the use of a non-halogenated flame retardant. They also fail to provide any further detail regarding their thermoset/thermoplastic mix; hence, they do not teach the composition limitations set forth in claims 13, 15, 16, 19, and 20.

Terao et al. are as set forth above and incorporated herein. Terao et al. disclose a tough epoxy resin composition good in flame retardancy and useful as a molding compound, wherein the composition is blend of epoxy resin (thermoset) and an olefin-based resin (thermoplastic). The composition of Terao et al. satisfies the composition limitations of claims *(13, 15, 16, 19 & 20)* (see Abstract; paragraphs 0001, 0004-0011), and they use an non-halogenated flame retardant in order to provide a material that will not emit corrosive or toxic gases in processing or burning. Where the compositions of the prior art are analogous (thermoset/thermoplastic/flame-retardant), one skilled in the art would have been motivated to use the molding composition of

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Terao et al. in the pallet of Moore, Jr. et al. because the presence of a non-halogenated flame retardant provides a material that will not emit corrosive or toxic gases in processing or burning.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the composition of Terao et al. as the thermoset/thermoplastic/flame-retardant blend in the pallet of Moore, Jr. et al. because Terao et al. disclose a molding composition featuring an epoxy resin (thermoset), an olefin-based resin (thermoplastic), and a non-halogenated flame retardant, resulting in a molding composition that does not emit corrosive or toxic gases in processing or burning.

***Allowable Subject Matter***

11. Claims 6, 8, 9, 11, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



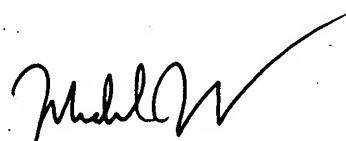
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*Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely  
Primary Examiner  
Art Unit 1712

July 25, 2005